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APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/051,905	01/17/	/2002	Scott Aguais	D3398-00033CIP	D3398-00033CIP 1722	
7	7590	10/06/2006		EXAM	INER	
DUANE MORRIS LLP One Liberty Place				GRAHAM, C	GRAHAM, CLEMENT B	
Philadelphia, I		ART UNIT	PAPER NUMBER			

3692

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Comments	10/051,905	AGUAIS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Clement B. Graham	3628					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timulated will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE.	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133)					
Status							
1) Responsive to communication(s) filed on 11 M	arch 2002	•					
· _ · · · · · · · · · · · · · · · · · ·	This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allower		secution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•						
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.		•					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1-7</u> is/are rejected.							
7) Claim(s) is/are objected to.	•						
8) Claim(s) are subject to restriction and/or	election requirement	•					
Application Papers	oloolion roquilomoni.						
•							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) acce							
Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents							
2. Certified copies of the priority documents							
3. Copies of the certified copies of the prior							
application from the International Bureau	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summary						
P) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) ☐ Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da						
Information Disclosure Statement(s) (PTO/SB/08)   Notice of Informal Patent Application   Paper No(s)/Mail Date   Other:							

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

- 1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

  A person shall be entitled to a patent unless –
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-7, are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman et al(Hereinafter Freeman US Patent No: 6, 249, 775).

As per claim 1, Freeman discloses a system for valuing and managing the risk of a plurality of credit instruments, said system comprising:

- a) a database for storing credit instrument data;
- b) a first calibration engine connected to said database, wherein said first calibration engine generates calibration parameters from said credit instrument data(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)
- c) a second pricing engine connected to said database and said first calibration engine, wherein said second pricing engine is adapted to calculate the net present values and a plurality of valuation metrics for said plurality of credit instruments by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)
- d) a third engine connected to said second pricing engine for performing simulation-based computations(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

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e) a fourth risk engine connected to said second pricing engine and said third engine for computing a plurality of risk and reward metrics; and

f) a report generator connected to said fourth risk engine for generating reports for use in managing risk. (Note abstract and see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67).

As per claim 2, Freeman discloses wherein at least of said plurality of credit instruments is a loan. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

As per claim 3, Freeman discloses further comprising at least one input data module for storing data relating to credit instruments in said database. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

As per claim 4, Freeman discloses further comprising a portfolio hierarchy server. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

As per claim 5, Freeman discloses a calibration engine for use in a system for valuing and managing the risk of a plurality of credit instruments, said calibration engine comprising:

- a) a first module for generating a plurality of basis instruments from input data relating to said plurality of credit instruments, wherein said input data comprises at least one of prices, ratings, sectors, and terms and conditions;
- b) a second module for generating a first term structure of riskfree zero prices and a risk-neutral process for interest rates from said plurality of basis instruments(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)
- c) a third module for generating one or more basic spread matrices from said plurality of basis instruments and said first term structure of risk-free zero prices;
- d) a fourth module for generating a second term structure of risk-neutral transition matrices and at least one smoothed credit spread matrix using said first term structure of risk-free zero prices, said module also adapted to develop

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generators using a transition matrix manager(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

- e) a fifth module for generating a third term structure of riskneutral transition matrices for a specific named obligor from said at least one smoothed credit spread matrix, said first term structure of risk-free zero prices, and said second term structure of risk-neutral transition matrices; and
- f) a sixth module for generating a plurality of spread volatility matrices. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67).

As per claim 6, Freeman discloses wherein at least one of said modules of said calibration engine generates data subsequently stored in a Mark-to-Future cube. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

As per claim 7, Freeman discloses a pricing engine for use in a system for valuing and managing the risk of a plurality of credit instruments, said pricing engine comprising:

- a) a first module for defining a state space;
- b) a second module for generating a state space by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments(see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)
- c) a third cash flow generation module for generating cash flows for said plurality of credit instruments, whereby said credit instruments may be subject to different prepayment or credit state assumptions; and
- d) a fourth module connected to said third cash flow generation module for generating a plurality of valuation attributes from said generated cash flows. (see column 2 lines54-67 and column 3 lines 1-67 and column 4 lines 49-67 and column 5-18 lines 1-67)

## CONCLUSION

3 The prior art of record and not relied upon is considered pertinent to

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Applicants disclosure.

Getchius et al (US 6,393,415 Patent ) teaches adaptive partitioning techniques in performing query request and routing.

Ginter et al (US Patent 5,892,900) teaches system and methods for secure transaction management and electronic rights protection..

Roberta et al (US Patent 6,292,788) teaches methods of investment instruments for prtforming tan deferred real estate exchanges.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

Sept 19, 2006

FRANTZY POINVIL
PRIMARY EXAMINER

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